

# 联合国 环境规划署

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**CHINESE** 

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执行蒙特利尔议定书 多边基金执行委员会 第八十三次会议 2019年5月27日至31日,蒙特利尔

工发组织 2019 年工作方案

## 基金秘书处的评论和建议

1. 工发组织请求执行委员会为表 1 所列其 2019 年工作方案,核准 192,500 美元,以及 13,475 美元的机构支助费用。提案见本文件附件。

表 1: 工发组织 2019 年工作方案

国别	活动/项目	请拨数额	建议数额(美							
		(美元)	元)							
A款:建议一揽子核	A 款: 建议一揽子核准的活动									
A1 分款: 氟氯烃淘沙	太管理计划项目准备									
博茨瓦纳*	一项氟氯烃淘汰管理计划准备 (第二阶段)	15,000	15,000							
缅甸*	一项氟氯烃淘汰管理计划准备 (第二阶段)	10,000	10,000							
尼加拉瓜*	一项氟氯烃淘汰管理计划准备 (第二阶段)	10,000	10,000							
尼日利亚**	一项氟氯烃淘汰管理计划准备 (第三阶段)	72,500	72,500							
苏里南*	一项氟氯烃淘汰管理计划准备 (第二阶段)	10,000	10,000							
多哥*	一项氟氯烃淘汰管理计划准备 (第二阶段)	20,000	20,000							
赞比亚*	一项氟氯烃淘汰管理计划准备 (第二阶段)	10,000	10,000							
	147,500	147,500								
	机构支助费用(占项目准备的 7%)	10,325	10,325							
	A1 分款共计	157,825	157,825							
A2 分款: 控制 HFC-	-23 副产品排放的项目准备									
墨西哥	在氟氯烃生产行业中控制 HFC-23 副产品排放的项目	45,000	45,000							
	准备									
	A2 分款小计	45,000	45,000							
	机构支助费用(占项目准备的 7%)	3,150	3,150							
	A2 分款共计	48,150	48,150							
	(A1分款、A2分款)累计	205,975	205,975							

<sup>\*</sup>环境规划署作为牵头执行机构

A款: 建议一揽子核准的活动

A1 分款: 氟氯烃淘汰管理计划项目准备

#### 项目说明

- 2. 工发组织作为合作执行机构,为表 1 中 A1 分款所列 6 个国家提出氟氯烃淘汰管理计划第二阶段准备的申请,以及为尼日利亚提出氟氯烃淘汰管理计划第三阶段准备的申请。
- 3. 环境规划署作为牵头执行机构,提供表 1 中 A1 分款所列支持 6 个国家项目准备申请的活动说明。每个国家的提案包括:对所申请项目准备资金的合理说明;各自氟氯烃淘汰管理计划第一阶段的执行进展报告;以及潜在开展活动的清单和相应预算。环境规划署已在其 2019 年工作方案中申请 145,000 美元外加机构支助费用¹。

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<sup>\*\*</sup> 开发计划署作为牵头执行机构

<sup>&</sup>lt;sup>1</sup> UNEP/OzL.Pro/ExCom/83/18 号文件

4. 开发计划署作为牵头执行机构,提供尼日利亚项目准备活动的说明,包括其氟氯烃淘汰管理计划第二阶段执行的最新情况说明。开发计划署已在其 2019 年工作方案中申请 22,500 美元外加机构支助费用<sup>2</sup>。

## 秘书处的评论

- 5. 在审查这 7 项申请时,秘书处考虑到了第 71/42 号决定所载第 5 条国家氟氯烃淘汰管理计划第二阶段准备的供资指南,依照核准的氟氯烃淘汰管理计划第一阶段和第二阶段(如尼日利亚的情况),截至本文件编写时付款申请的执行情况,以及第 82/45(c)(ii)号决定。秘书处注意到对每个国家的资金申请都符合第 71/42 号决定。
- 6. 关于对尼日利亚的申请,秘书处注意到在第八十二次会议上,执行委员会同意对于氟氯烃淘汰管理计划第二阶段超越 2020 年的国家,将氟氯烃淘汰管理计划第三阶段项目准备纳入 2019-2022 年综合业务计划,但有一项了解,即项目准备申请将不得早于氟氯烃淘汰管理计划第二阶段终止日期两年提交³。尽管尼日利亚的申请早于第二阶段终止日期两年提交⁴,注意到第二阶段核准时就了解这项核准并不排除尼日利亚在 2020 年之前提交氟氯烃淘汰管理计划第三阶段⁵。相应地,项目准备申请就提交于第八十三次会议。

### 秘书处的建议

7. 秘书处建议依照表 1 中 A1 分款所示资金水平,一揽子核准工发组织为博茨瓦纳、缅甸、尼加拉瓜、苏里南、多哥和赞比亚提出的氟氯烃淘汰管理计划第二阶段项目准备以及为尼日利亚提出的氟氯烃淘汰管理计划第三阶段项目准备的申请。

#### A2 分款: 控制 HFC-23 副产品排放的项目准备

#### 项目说明

8. 工发组织为墨西哥控制氟氯烃生产行业 HFC-23 副产品排放的项目准备提交了一项资金申请,如上表 1 中 A2 分款所列。项目准备申请的详细信息载于附属于本文件的工发组织提案的第 2 款。

#### 秘书处的评论

- 9. 秘书处注意到此项资金申请(50,000 美元)高于过去类似项目准备申请核准的资金(即每企业 30,000 美元),并要求工发组织提供支持信息。工发组织澄清此项目准备需要专家具备与HFC-23 排放、监测、控制和销毁相关的经验和技术知识,而消费行业氟氯烃投资项目准备则不需要。
- 10. 商议后,同意将资金调整为45,000美元。

<sup>&</sup>lt;sup>2</sup> UNEP/OzL.Pro/ExCom/83/17 号文件

<sup>3</sup> 第 82/45(c)(ii)号决定

<sup>4 2024</sup>年12月31日

<sup>5</sup> 第 81/40(c)号决定

# 秘书处的建议

11. 秘书处建议一揽子核准上表 1 中 A2 分款所列墨西哥氟氯烃生产行业控制 HFC-23 副产品排放的项目准备申请。



# **UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

 $83^{rd}$  Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol

**UNIDO Work Programme** 

83<sup>rd</sup> Meeting of the Executive Committee

#### **Introduction**

The UNIDO Work Programme for the consideration of the 83<sup>rd</sup> Meeting of the Executive Committee (ExCom) of the Multilateral Fund (MLF) has been prepared following the Government requests as well as based on ongoing and planned activities. The Work Programme will support the implementation of UNIDO's three year Rolling Business Plan 2019-2021.

The 83<sup>rd</sup> UNIDO WP is addressing preparatory assistance requests and requests for extension of the duration of the Enabling activities for HFC phase-down.

Preparatory Assistance is submitted for the 83<sup>rd</sup> Executive Committee Meeting consideration for Mexico for the country compliance with paragraphs 6 and 7 of Article 2J of the Montreal Protocol. Furthermore, preparatory assistance is submitted for Botswana, Myanmar, Nicaragua, Suriname, Togo and Zambia to enable the countries to overview and update data necessary for the launch and implementation of HPMP Stage II. Also, preparatory assistance is submitted for the 83<sup>rd</sup> Executive Committee Meeting consideration for Nigeria to enable the country to overview and update data necessary for the launch and implementation of HPMP Stage III.

As per decision 81/31(a), Enabling activities for HFC phase-down were approved with a duration of 18 months, however if needed, that period can be extended for additional 12 months, when an official request is submitted. UNIDO has received official letters from Armenia, Bosnia and Herzegovina, Burkina Faso, Cameroon, Chile, the Congo, the Gambia, Macedonia, Mexico, Serbia, Somalia, Sudan, Tunisia, Turkey and Uruguay, requesting the duration of the implementation period to be extended for additional 12 months. The reasons for the extensions are provided in Section 3.

The UNIDO Work Programme Amendment for the consideration of the 83<sup>rd</sup> ExCom Meeting comprises the following sections:

- Section 1: Consolidated list of activities foreseen for the above requests by project types and country;
- Section 2: Project concepts indicating details and funding requirements;
- Section 3: Requests for extension of the duration of the Enabling activities for HFC phase down.

#### Funding is requested as follows:

- Preparatory Assistance for compliance with paragraphs 6 and 7 of Article 2J of the Montreal Protocol for Mexico amounting to US\$ 48,150 (including US\$ 3,150 representing 7.0% A.S.C.);
- Preparatory assistance funding for HPMP Stage II in Botswana, Myanmar, Nicaragua, Suriname, Togo and Zambia and for HPMP Stage III for Nigeria<sup>6</sup> amounting to US\$ 157,825 (including US\$ 10,325 representing 7.0 % A.S.C);

Total: US\$ 205,975 (including US\$ 13,475 agency support cost).

<sup>&</sup>lt;sup>6</sup> The Project Concepts for Botswana, Myanmar, Nicaragua, Suriname, Togo and Zambia are included in the Lead Agency (UN Environment) Work Programme. The Project Concept for Nigeria is included in the Lead Agency (UNDP) Work Programme.

# **SECTION 1**

Country	MLF HCFC Status	Туре	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C.	P.D.	Remarks
			Preparato	ory Assistance for	compliance with paragraphs 6 and 7	of Article 2J	of the Mont	real Protoc	ol		
Mexico	Non- LVC	PRP	HFC-23	Production	Project preparation for the control of HFC-23 by-product emissions in the HCFC production sector	45,000	3,150	48,150	7%	12	
			SU	BTOTAL		45,000	3,150	48,150			
					Preparatory Assistance for HP	MP					
Botswana	Non- LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	15,000	1,050	16,050	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Myanmar	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Nicaragua	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Nigeria	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage III HPMP	72,500	5,075	77,575	7%	24	In cooperation with UNDP. Concept is submitted by UNDP.
Suriname	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
Togo	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	20,000	1,400	21,400	7%	24	In cooperation with UN Environment.

# UNEP/OzL.Pro/ExCom/83/19

Country	MLF HCFC Status	Туре	Substance	Sector and Sub-Sector	Title of Project	Total amount USD	A.S.C.	Total (incl ASC) USD	A.S.C. %	P.D.	Remarks
											Concept is submitted by UN Environment.
Zambia	LVC	PRP	HCFC-22	REF-Servicing	Preparation of Stage II HPMP	10,000	700	10,700	7%	24	In cooperation with UN Environment. Concept is submitted by UN Environment.
	SUBTOTAL				147,500	10,325	157,825				
GRAND TOTAL				192,500	13,475	205,975					

#### **SECTION 2**

#### **Project Concept**

**Country:** Mexico

**Title:** Project preparation for the control of HFC-23 by-product emissions in the HCFC

production sector

**Project Duration:** 12 months

**Project Budget:** US\$ 45,000 (excl. 7% Agency Support Costs)

**Implementing Agency: UNIDO** 

Coordinating Agency: National Ozone Unit, Environmental and Natural Resources Secretariat

(SEMARNAT)

## **Project Summary**

At the 28<sup>th</sup> Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, held in Kigali in October 2016, the Parties agreed to phase down HFCs. The Kigali Amendment entered into force on 1 January 2019, since more than twenty instruments of ratification, acceptance or approval of the Amendment have been deposited before that date by States or regional economic integration organizations that are Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer. The Government of Mexico ratified the Kigali Amendment on 25 September 2018 through Approval.

The Government of Mexico is currently implementing its Stage II HCFC Phase-out Management Plan (HPMP) in the consumption sector that help the Government of Mexico to reach compliance with her targets agreed with the Multilateral Fund, which are stricter than the MP phase-out schedule. Mexico agreed to 35% reduction by 2018, 50% reduction by 2020 and 67.5% reduction in 2022. Stage II HPMP focuses on the complete phase-out of HCFC-141b consumption in all sectors as well as on the further reduction of HCFC-22 consumption in the service and aerosol/solvent sectors.

Mexico is one of the few countries with an established ODS production facility. The only producer of HCFC-22 in Mexico is CYDSA, Quimobasicos. The company has two production lines, which in the past produced CFC-11 and CFC-12 as well as HCFC-22.

As per the approved HPMPs for Mexico, "production of HCFCs will be strictly monitored and regulated through temporary measures and the import/export quota system. The yearly monitoring will be carried out through the licensing and quota system and verification site visits to be undertaken by independent international experts", to verify that the annual HCFC production levels were in line with the Montreal Protocol control targets.

However, except for annual monitoring, Mexico did not receive financial support from the Multilateral Fund for the reduction of HCFC-22 in the production sector.

The Office of the National Ozone Unit (NOU) in Mexico is under the direct supervision of the General Direction of Air Quality Management and by the Vice Minister for Environmental Protection of SEMARNAT (Ministry of Environment); this enables the central authority for environment to direct the policies, strategies and priorities for the ODSs phase-out as an integrated component of the environmental

policies of México. The NOU is the focal point for Montreal Protocol activities and mainly coordinates the whole Montreal Protocol programme in the country and prepares the basis for legislative and regulatory measures to be adopted by the responsible government authorities with an emphasis on the HCFC phase-out and HFC phase-down targets.

The NOU is also responsible for monitoring the ODS import and consumption data and has for this purpose developed the Information and Monitoring System (SISSAO).

#### Past and Current management practices for HFC-23 by-product control in Mexico.

The Company Quimobásicos S.A de C.V. was founded in 1961 in Monterrey city as part of the CYDSA Group in a strategic alliance with Honeywell, with the main objective of manufacturing and commercializing fluorocarbon refrigerant gases under the Genetron® brand for national consumption and exports to Center, South America and the Caribbean.

During its first 28 years produced essentially CFC, while in the period from 1989 to 2005 the company produced CFC (R-12 and R-11) and HCFC R-22 alternately.

Difluorochloromethane (HCFC-22) is produced by reacting chloroform (CHCl3) and anhydrous hydrogen fluoride (HF); such reaction produces predominantly HCFC-22 with small amounts of HFC-23, an undesirable by-product. HFC-23 generation ratio varies between 1.78% and 3.44 on a weight basis. Regarding the specific case of Quimobásicos, the average generation ratio reported has been 2.44%, which means 24.4 kg of HFC-23 are produced by every tonne of HCFC-22. Figure I illustrates the historical production of HCFC-22 and the respective emissions of HFC-23 in CO2e (Figure II).

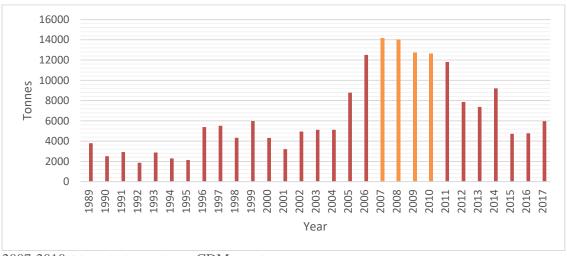
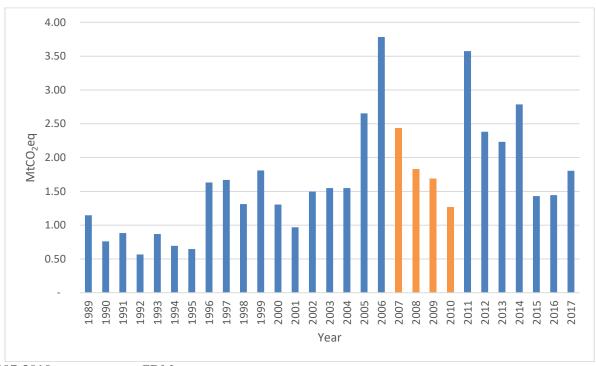


Figure I Historical HCFC-22 production in Mexico (tonnes)

2007-2010 CORRESPOND TO THE CDM PERIOD SOURCE: SISSAO MEXICO, 2018.

As it is shown, the highest levels of production took place in the period from 2005 to 2014, with 2007 and 2008 as the top production years with 14 thousand tons per year, which fell within the CDM project, where the emissions of line 1 were controlled with the plasma equipment.

Figure II Historical HFC-23 emissions in Mexico



2007-2010 REFER TO THE CDM PERIOD ESTIMATE BASED ON HCFC-22 PRODUCTION, 2018

## Project Preparation in order to comply with the Kigali Amendment

As per Paragraph 6 of Article 2 J of the amended Montreal Protocol (after Kigali), "Each Party manufacturing Annex C, Group I, or Annex F substances shall ensure that for the twelve-month period commencing on 1 January 2020, and in each twelve-month period thereafter, its emissions of Annex F, Group II, substances generated in each production facility that manufactures Annex C, Group I, or Annex F substances are destroyed to the extent practicable using technology approved by the Parties in the same twelve-month period. "

In line with Paragraph 7 of Article 2 J of the amended Montreal Protocol (after Kigali): "Each Party shall ensure that any destruction of Annex F, Group II, substances generated by facilities that produce Annex C, Group I, or Annex F substances shall occur only by technologies approved by the Parties."

In order to comply with Paragraphs 6 and 7 of Article 2J of the Montreal Protocol, the Government of Mexico requested UNIDO to submit a project preparation request to the 83<sup>rd</sup> Meeting of the Executive Committee, which would allow the preparation of a project for submission to the 84<sup>th</sup> Meeting of the Executive Committee to control the HFC-23 by-product emissions from 1 January 2020.

Item	Cost US\$
Sub-Contract for the data collection, verification and preparation of HFC-23 control options	25,000
International consultant for project preparation	13,000
Travel Costs	7,000
TOTAL	45,000

# **SECTION 3**

Country	Project Title	Extension Duration (months)	Reason for extending the duration	Official request for extension received?
Armenia	Enabling activities for HFC phase-down (ARM/SEV/80/TAS/01+)	12	Armenia ratified the Kigali Amendment on 27 March 2019, and the main reason for requesting extension is to have sufficient time to implement the follow up activities related to the amendments to the Law and by-laws to cover HFCs, and the various awareness raising activities. A delay also occurred in contracting the company for the upgrade of the E-licensing system to include HFCs. Special focus is paid to the energy-efficiency issues and once the KA ratification enters in to force (when the instrument of ratification is duly deposited), a series of workshops related to the energy efficiency in HVACR sector will be organized for end-users, importers, and RAC technicians. For the next 12 months, Armenia will focus on the following activities:  Legal framework amendments;  Upgrade of the e-licensing system;  Energy-efficiency activities related to the HVACR sector; and	Yes
Bosnia and Herzegovina	Enabling activities for HFC phase-down (BHE/SEV/80/TAS/01+)	12	The country requested extension of the project due to the required follow up for the ratification with the relevant stakeholders.	Yes
Burkina Faso	Enabling activities for HFC phase-down (BKF/SEV/80/TAS/01+)	12	The extension is requested in order to give sufficient time to ensure proper and adequate execution of all activities, without impacting the implementation of the HPMP. Progress made so far and remaining activities are as follows:  • Review of codes and standards: Burkina Faso utilizes a ten digit HS code with the four last digits all showing zeros for the HFCs. The proposal is to use digits 7 and 8 to differentiate the HFCs similar to the CN code in Europe. A proposal to make this change a regional change through the CEDEAO is premature at present.  • Burkina Faso passed a law in 2018 adding HFCs to the controlled substances. Adding to the quota system is in progress.  • The National mechanism used for ODS reporting is at the moment manual and a new electronic system will be introduced in 2020. Customs will be added to the system to facilitate reporting.  • Assessment of the refrigeration and air-conditioning (RAC) servicing sector (formal and informal sector) is in progress.  • Identification of appropriate policies to facilitate the phase-down of HFCs and the introduction of low-GWP non-ODS alternative technologies: Discussions in progress with the ozone office regarding the use of low-GWP alternatives.	Yes
Cameroon	Enabling activities for HFC phase-down (CMR/SEV/80/TAS/01+)	12	The ratification process of the Kigali amendment has been initiated, however it is a long process that needs to be supported in the framework of the Enabling Activities and it won't be completed by the initially planned completion date of	Yes

Country	Project Title	Extension Duration (months)	Reason for extending the duration	Official request for extension received?
			the project. In addition, some activities, such as the updating of the customs code system, have had a late start as the consultant could be on board only recently.	
Chile	Enabling activities for HFC phase-down (CHI/SEV/80/TAS/02+)	12	The extension is requested to advance the actions planned under UNIDO's component, considering that some activities needed the necessary coordination for their development at the national level and to align with the general timetable agreed with the NOU and the implementing agencies involved in the project.	Yes
Congo	Enabling activities for HFC phase-down (PRC/SEV/80/TAS/01+)	12	Extension is required due to delays in selection process and recruiting of national consultants. Subsequent delays in preparation of national legislation and support of relevant legislative activities and respective workshops, information dissemination and awareness could not be accomplished in originally projected time.	Yes
Gambia	Enabling activities for HFC phase-down (GAM/SEV/80/TAS/01+)	12	Activities under the project are progressing very well, however, an extension is requested to ensure complete implementation of all activities. The country is preparing for the ratification of the Kigali Amendment, but the work plan had to be updated because additional coordination and provision of background documents were necessary to engage all relevant ministries and national assembly members that are requested to vote on the ratification.	Yes
Macedonia	Enabling activities for HFC phase-down (MDN/SEV/80/TAS/01+)	12	The extension is required in order to finalize the remaining activities, such as:  Review of the national mechanisms used for ODS reporting to include HFCs consumption, especially considering the servicing sector (the informal sector in particular);  In coordination with the Customs Administration finalization of the customs codes related to the Annex F substances and their blends harmonization;  Enhancement of the import and export license system to include HFCs and other alternatives;  Improving a national database to include HFCs and other ODS alternatives;  Reviewing operating codes and standards for the correct and efficient use of HFCs and ODS alternatives in the entire value chain  Adoption of the Law on Ratification of the Kigali Amendment by the Parliament.  So far, the initial activities have been undertaken, the analysis of the legal framework is completed, consultations with legal experts on the legislation harmonization, review of the customs codes for HFCs and their blends and preparation of harmonized tariff codes.	Yes
Mexico	Enabling activities for HFC phase-down (MEX/SEV/80/TAS/02+)	12	Although the enabling activities progressed very well, the extension is requested to finalize the work planned for the period May - July and the proper development of the awareness and dissemination activities at the national level (workshop) included in the project. Additional time was necessary during the	Yes

Country	Project Title	Extension Duration (months)	Reason for extending the duration	Official request for extension received?
			project implementation to ensure the clear understanding and approval from the new governmental authorities in Mexico.	
Serbia	Enabling activities for HFC phase-down (YUG/SEV/80/TAS/01+)	12	The country is preparing for the ratification of the Kigali Amendment, following also EU directives, which requires more time to ensure the system is developed in line with the EU requirements.	Yes
Somalia	Enabling activities for HFC phase-down (SOM/SEV/80/TAS/01+)	12	Extension is requested due to the slower pace of activities implementation in the country. The security situation imposes some technical difficulties related to the organization of the activities, which are ongoing, but will need additional time to ensure their proper implementation.	Yes
Sudan	Enabling activities for HFC phase-down (SUD/SEV/80/TAS/01+)	12	Extension is requested due to the delayed organization of respective co- implementing joint work (incl. workshops). Also, there were delays in preparation of the national strategies to implement established action plans in the prioritized areas for the country.	Yes
Tunisia	Enabling activities for HFC phase-down (TUN/SEV/80/TAS/02+ and TUN/SEV/80/TAS/01+)	12	Funding for the Enabling Activities Project for Tunisia has been confirmed by MLF as well as bilateral partner. Initial coordination and grant agreement procedures requested more time. Since then, the activities under the project are advancing as planned and will be finalized with an extension of max 12 months.	Yes
Turkey	Enabling activities for HFC phase-down (TUR/SEV/80/TAS/01+)	12	The extension is required due to the fact that HFCs are present in all the sectors and targeted workshops are taking place in different regions. The workshops are planned for the whole duration of 2019. The activities are coordinated with the EU f-gas project on field to ensure complementarity and avoid overlaps.	Yes
Uruguay	Enabling activities for HFC phase-down (URU/SEV/80/TAS/01+)	12	Extension is requested to conclude two minor planned actions in the UNIDO's component between June and August. Some activities demanded coordination for their development at the national level and aligned with the general timetable agreed with the NOU and UNDP (as lead agency of the project).	Yes